

MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE. Assistant Editor: HERBERT C. HUNTER.

VOL. XXXVI.

FEBRUARY, 1908.

No. 2.

The MONTHLY WEATHER REVIEW summarizes the current manuscript data received from about 3,500 land stations in the United States and about 1,250 ocean vessels; it also gives the general results of the study of daily weather maps based on telegrams or cablegrams from about 200 North American and 40 European, Asiatic, and oceanic stations.

The hearty interest shown by all observers and correspondents is gratefully recognized.

Acknowledgment is also made of the specific cooperation of the following chiefs of independent, local, or governmental services: R. F. Stupart, Esq., Director of the Meteorological Service of the Dominion of Canada; Señor Manuel E. Pastrana, Director of the Central Meteorological and Magnetic Observatory of Mexico; Camilo A. Gonzales, Director-General of Mexican Telegraphs; Capt. I. S. Kimball, General Superintendent of the United States Life-Saving Service; Commandant Francisco S. Chaves, Director of the Meteorological Service of the Azores, Ponta Delgada, St. Michaels, Azores; W. N. Shaw, Esq., Director Meteorological Office, London; Maxwell Hall, Esq., Govern-

ment Meteorologist, Kingston, Jamaica; Rev. L. Gangoiti, Director of the Meteorological Observatory of Belen College, Havana, Cuba; Luis G. y Carbonell, Director, Meteorological Service of Cuba, Havana, Cuba; Rev. José Algué, S. J., Director of the Weather Bureau, Manila Central Observatory, Philippines; Maj. Gen. M. A. Rykachev, Director of the Physical Central Observatory, St. Petersburg, Russia; Carl Ryder, Director, Danish Meteorological Institute, Copenhagen, Denmark.

As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea level and latitude 45°.

FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

IN GENERAL.

February, 1908, was unusually stormy over the eastern half of the American Continent and, as a whole, comparatively quiet from the Rocky Mountains to the Pacific coast. The temperature averaged below normal from the Mississippi River to the Atlantic, and in California and Arizona; it was above the seasonal average from the Mississippi River over the Great Plains and the Rocky Mountain, middle, and northern Plateau districts, and on the north Pacific coast. Precipitation was in excess, except in areas in the west and northwest and in the southern Rocky Mountain region. Snow was reported on the ground thruout the month in the Rocky Mountain region and from the upper Missouri Valley over New England.

Storms from the American Continent advanced over the Atlantic on the 2d, 7th, 15th, 20th-23d, and 27th, those of the last ten days of the month being the most severe in the middle and northern latitudes of the ocean. In the Iceland area the lowest barometer of the month, 28.40 inches, was reported on the 22d. Over the British Isles pressure was high during the first decade, and was generally low and fluctuating during the balance of the month. In the vicinity of the Azores the barometer continued high, except from the 10th to the 16th, when it was relatively low in that region. Over western continental Europe the barometer was low, except in the southwest, on the 1st, 4th, 15th, and 18th to 29th. In the Asiatic area winter pressure persisted, except on the 9th, 11th, 18th, and 25th, when slight depressions appeared. On the 21st and at the close of the month readings 31.00 and 31.06 inches, respectively, were reported at Irkutsk. Reports from Nome, Alaska, were missing during a great portion of the month. Over the Hawaiian Islands pressure was high, except on the 4th, 10th, and 21st, when it was slightly below normal; from the 25th to the 29th a marked depression covered that region.

The month opened with a severe storm central over Lake Huron. This storm moved over the Canadian Maritime Prov-

inces, with reported pressure 28.84 inches at Father Point, Quebec, on the morning of the 2d, attended by gales and snow from the Great Lakes over the North Atlantic States, reached Iceland on the 6th, with pressure 29.06 inches at the morning report, and apparently past thence over Scandinavia and northern European Russia. Following this storm an area of high barometer that had covered the western half of the American Continent and adjacent portions of the Pacific Ocean moved eastward to the Atlantic coast by the 5th, attended by freezing temperatures on the middle and east coast of the Gulf of Mexico, and by killing frost in central and light frost in southern counties of Florida on the morning of the 3d.

Closely following this high area a storm crossed the continent from the 2d to 7th. This storm was severe from the 4th to 6th while crossing the central valleys and the Lake region, and on the 6th and 7th was the severest storm of the month in New England. It was attended by heavy snow from the Lake region over the Middle Atlantic and New England States. Advancing over the Canadian Maritime Provinces on the 8th the disturbance reached Iceland on the 10th, and northern European Russia on the 12th and 13th. The most extensive high area of the month advanced from the Bering Sea region to the Atlantic seaboard from the 1st to 8th, attended by the lowest temperature of the season in the Middle Atlantic States, a reading of 6° being recorded at Washington, D. C., on the morning of the 9th.

Referring to the alternations of the weather during the early portion of February the Buffalo, N. Y., News, of February 6, remarks, editorially, as follows:

Leaving out of account the present storm as something not yet ready for the record it will be admitted on the face of the returns that western New York has had a spell of weather in the last few days. The wit who said the weather had gone into vaudeville failed only to take into his tally the tragedy of blizzards and Arctic waves. In the past two weeks cold waves, snowstorms and high winds, and gales have followed each other in rapid succession and Buffalo has had more than her share of the snow, about 26 inches having fallen during Saturday, Sunday, and